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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,677	10/31/2001	Isao Sakurai		4260

7590 12/11/2002

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Chicago, IL 60610

EXAMINER
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EGAN, BRIAN P

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 12/11/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-7

<b>Office Action Summary</b>	<b>Application No.</b> 09/980,677	<b>Applicant(s)</b> SAKURAI ET AL.	
	<b>Examiner</b> Brian P. Egan	<b>Art Unit</b> 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the length exceeds 150 words.

Correction is required. See MPEP § 608.01(b).

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 27 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The limitation, "the pressure sensitive adhesive... further comprising a count of generated particles having a diameter of 0.1µm or more generated from the pressure sensitive adhesive

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sheet with the release sheet is equal to or less than 100 particles/liter,” is non-enabling. It is not clear what the “generated particles” actually are, how these particles are being “generated,” and where these particles are located. Proper clarification and/or correction are required.

6. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. First, there is a lack of antecedent basis for, “the content of silicone compound.” Second, it is unclear where the silicone is located – if silicone is present is it in the adhesive layer, the base layer, or both? Proper clarification and/or correction are required.

7. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. First, there is a lack of antecedent basis for “the amount of gas generated.” The Examiner suggest replacing “wherein the amount” with “further comprising an amount” to facilitate clarity. Second, the limitation, “wherein the amount of gas generated from the pressure sensitive adhesive sheet at a temperature of 85°C for 30 minutes is equal to or less than 20mg/m<sup>2</sup>,” is a process limitation and is not germane to the issue of patentability of the device itself absent a demonstration of unexpected results. Therefore, this limitation has not been given patentable weight. Proper clarification and/or correction are required.

8. Claims 16-17 are rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. There is a lack of antecedent basis for “the sum of amounts.” The Examiner suggests replacing “wherein the sum” with “further comprising a sum” to facilitate clarity. Proper clarification and/or correction are required.

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9. Claims 18-19 are rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. The term "lint free paper" is indefinite. It is unclear what the Applicant considers lint-free paper to be. Proper clarification and/or correction are required.

10. Claims 20-21 are rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. The phrase "wherein an antistatic layer is provided" renders the claim indefinite. The Examiner suggests replacing the aforementioned phrase with "further comprising an antistatic layer provided" to facilitate clarity. Proper clarification and/or correction are required.

11. Claims 24-25 are rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. There is a lack of antecedent basis for the term, "wherein the surface resistivity." The Examiner suggests replacing the aforementioned terminology with "further comprising a surface resistivity" to facilitate clarity (note that the remainder of the claim will need to be edited as well to be in accordance with the suggested change). Proper clarification and/or correction are required.

12. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. There is a lack of antecedent basis for "the weight ratio." The Examiner suggests replacing "wherein the weight ratio" to "further comprising a weight ratio" to facilitate clarity. Proper clarification and/or correction are required.

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13. Claims 31-32 are rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. There is a lack of antecedent basis for “the density.” The Examiner suggest replacing “wherein the density” with “further comprising a density” to facilitate clarity. Proper clarification and/or correction are required.

***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 14-25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 08-245932.

JP ‘932 discloses a pressure sensitive adhesive sheet comprising a base (see Abstract, Fig. 1, #1) and a pressure sensitive adhesive layer (see Abstract, Fig. 1, #3) provided on the base. The base is formed from a plastic film (see translation, p.2, paragraph [0009]). The pressure sensitive adhesive sheet further comprises an antistatic layer between the pressure sensitive layer and base layer (see Abstract, Fig. 1, #2). The antistatic layer is composed of a thin film of a metal oxide (see Abstract). The resistivity of the antistatic layer is in the range of  $1 \times 10^7 - 10^{14} \Omega$  (see translation, p.6, Table 1). JP ‘932 discloses the use of an acrylic adhesive layer (see Translation, p.3, paragraph [0014]). JP ‘932 does not disclose that the adhesive comprises silicone,  $\text{No}_x^-$ ,  $\text{Cl}^-$ ,  $\text{PO}_4^{3-}$ ,  $\text{K}^+$ ,  $\text{F}^-$ ,  $\text{Na}^+$ , or  $\text{Ca}^{2+}$ . Therefore, the adhesive layer is inherently free of the aforementioned elements. The burden is upon the applicant to prove otherwise.

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '932 in view of Meyer (#6,228,449).

JP '932 teaches a pressure sensitive adhesive sheet as detailed above. JP '932 teaches proposed uses of the adhesive sheet which include the use of the sheet for electronic equipment and semiconductor parts (see Translation, p.1, paragraph [0001]). JP '932 fail to teach the use of a release layer with a releasing agent comprising copolymers of olefin-based thermoplastic elastomers and polyethylene resins.

Meyer, however, teach the use of a release film that is free of silicone and comprises a copolymer of ethylene and alpha-olefins (Col. 1, line 59 to Col. 2, line 5). The copolymer has a density less than 0.9 g/cc (Col. 2, lines 9-15) and the composition of the copolymer can be modified around the 50:50 ratio depending on the desired end product (Col. 2, lines 22-35). Meyer teaches that release films are notoriously well known in the adhesive tape industry for the purpose of providing a release surface so that a tape can be wound and unwound from a roll without the adhesive sticking to the backside of the tape (Col. 1, lines 9-15). Meyer specifically teaches away from the use of silicone release agents for the purpose of preventing the use of a material (silicone) that is easily transferred between the component surfaces as well as the users

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hands that ultimately results in poor adhesive and physical properties of the product (Col. 1, lines 22-32) – thereby implicitly teaching the elimination of “generated particles” from the interaction between the release layer and adhesive layer. It would have been obvious through routine experimentation to one of ordinary skill in the art at the time applicants invention was made to have modified an adhesive sheet by using a release sheet that is free of silicone for the purpose of not only protecting the adhesive surface and facilitating the winding and unwinding of the adhesive substrate but also to prevent contamination via silicone transfer between components as taught by Meyer.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicants invention was made to have modified JP ‘932 to include a silicone-free release liner as taught by Meyer in order to protect the adhesive surface, facilitate winding and unwinding of the adhesive substrate, and to prevent contamination via silicone transfer between components.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Egan whose telephone number is 703-305-3144. The examiner can normally be reached on M-F, 8:30-5.


If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Harold Y. Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

BPE  
December 10, 2002



HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

12/10/02